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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/441,231	11/16/1999	RAYMOND M. BROEMMELSIEK	4919	4055

6858 7590 08/03/2004

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EXAMINER

CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/441,231

Applicant(s)

BROEMMELSIEK, RAYMOND M.

Examiner

Daniel J Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

Claims 1-21 and 25-26 are presented for examination. This office action is in response to the amendment filed on 7-19-2002.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisey (5,367,614) in view of Reichlen (6,396,497).

Regarding claim 1, Bisey discloses that the claimed feature of a method of displaying a series of images according to a user's position relative to a display screen having a display area, said display method comprising: displaying a first image from the series of images in the display area (See Fig 1); receiving information [i.e. "distance information between the computer operator and the image displayed on computer monitor"; col 4 line 59-61] regarding a change in the user's position ["head movement"] relative to the display screen ["computer monitor"]; replacing the first image with a second image [i.e. "updated/changed image on the computer monitor based on distance information"] from the series

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of images in the display area in response to the change in the user's position ["user's head movement"] (See Abstract, col 1 line 62-col 2 line 27, col 4 line 46-col 5 line 36)

Bisey does not specifically disclose that "a first/second image from the series of images". However, such limitation is shown in the teaching of Reichlen. [i.e. "The method displays a subset of view space portions to the user at one time, senses motion of the user's head, and changes the portions of the view space displayed, in discrete units of view space portions, in response to changes in the position of the user's head"; Abstract line 12-17] (See Abstract, col 3 line 12-53). It would have been obvious to one skilled in the art to incorporate the teaching of Reichlen into the teaching of Bisey, in order to allow user to control multiple images/frames effectively aspects of its behavior by head motion, as such improvement is also advantageously desirable in the teaching of Bisey for "performing real-time control of animated three-dimensional graphics used extensively in wide variety of video game scenarios", which contains multiply number of images/frames. (See col 2 line 66-col 3 line 2 in Bisey)

Regarding claim 2, Bisey discloses that the series of image is a series of 2 dimensional images. (See col 5 line 46-47)

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Regarding claim 3, Bisey discloses that the change in the user's position is determined by a change in the user's head position. (See Abstract line 4)

Regarding claim 4, Bisey discloses that the second image is an image from the series of images determined by the user's head position where the change in the user's head position is a result of movement selected from the group consisting of left head roll, right head roll , up tilt, down tilt, right translation , left translation, forward translation and backward translation. (See col 5 line 29-36, col 5 line 14-18, col 5 line 37-53; Also See col 6 line 15-28 in Reichlen)

Regarding claim 5, Bisey discloses that the right translation and left translation produce a continuous rotation of images in the series of images. (See col 5 line 14-18, col 5 line 37-53; Also See col 6 line 15-28 in Reichlen)

Regarding claim 6, Bisey discloses that the second image is the first image displayed with new display characteristics [i.e. modified display attribute such as color, shape]. (See Abstract, col 1 line 62-col 2 line 27, col 4 line 46-col 5 line 36)

Regarding claim 8, Bisey discloses that the first image is a center image of the series of images. (See Abstract, col 1 line 62-col 2 line 27, col 4 line 46-col 5 line 36)

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Regarding claim 9, Bisey does not specifically disclose that if the second image is not available to be displayed then an available image in the series of images closest to the second image is displayed. However, utilizing the similarity system in an analogous art, is well known to one skilled in the art for producing optimized display result. Therefore, it would have been obvious to one skilled in the art to include the similarity system into the teaching of Bisey.

Regarding claim 10, refer to the discussion for the claim 1 hereinabove, Bisey discloses that the claimed feature of a method of simultaneously receiving, displaying a single image at any instant and interacting with a series of images in response to movement of an interactive device [i.e. "ultrasonic transmitter/receiver module"], said display method comprising: a) receiving for display of a single image at any instant a first image from the series of images; b) receiving for display of a single image at any instant subsequent images from the series of images; c) permitting viewing of and interacting with the first image while performing step b) where interaction with the first image is in response to signals from the interactive device. (See Abstract, col 1 line 62-col 2 line 27, col 4 line 46-col 5 line 36; Also See Abstract, col 3 line 12-53 in Reichlen)

Regarding claim 11, claim 11 is similar in scope to the claim 2, and thus the rejection to claim 2 hereinabove is also applicable to claim 11.

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Regarding claim 12, Bisey discloses that the signals from the interactive device represent movement of the interactive device. (See Fig 1)

Regarding claim 13, Bisey discloses that the step of displaying a second image ["modified image"] in response to movement of the interactive device ["ultrasonic transmitter"]. (See Fig 1)

Regarding claim 14, Bisey discloses that the second image is an image from the series of images determined by the movement of the interactive device where the movement is selected from the group consisting of left movement right movement, forward movement and backward movement. (See col 5 line 29-36, col 5 line 14-18, col 5 line 37-53; Also See col 6 line 15-28 in Reichlen)

Regarding claim 15, claim 15 is similar in scope to the claim 5, and thus the rejection to claim 5 hereinabove is also applicable to claim 15.

Regarding claims 16-19, Bisey discloses that the interactive device is that of a tracking ball/ joystick/ body part movement/ the head. (See Abstract, Fig 1, col 13 line 64-col 14 line 22)

Regarding claims 20-21, claims 20-21 are similar in scope to the claims 8-9, and thus the rejections to claims 8-9 hereinabove are also applicable to claims 20-21.

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Regarding claims 25-26, Claims 25-26 are the corresponding computer readable medium of claims 1 and 10. Thus, the rejection to claims 1 and 10 hereinabove are also applicable to claims 25-26.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306 (Central fax)**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).



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Any inquiry of a general nature or relating to the status of this application  
or proceeding should be directed to the Technology Center 2600 Customer

Service Office whose telephone number is (703) 306-0377.

djc  
July 19, 2004



**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**